IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Hirotoshi TAKAHASHI et al.

Serial No. NEW : Attn: APPLICATION BRANCH

Filed July 3, 2003 : Attorney Docket No. 2003 0924

MODULATOR AND DEMODULATOR (Rule 1.53(b) Divisional of Serial No. 10/036,428, Filed January 7, 2002)

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

THE COMMISSIONER IS AUTHORIZED TO CHARGE ANY DEFICIENCY IN THE FEES FOR THIS PAPER TO DEPOSIT ACCOUNT NO. 23-0975

Sir:

Pursuant to the provisions of 37 CFR 1.56, 1.97 and 1.98, Applicants request consideration of [X] the references listed on attached form PTO-1449 and/or [] the additional information identified below in paragraph 3. A legible copy of each reference listed on the form PTO-1449 and each U.S. patent application listed below is enclosed, except a copy is not provided for each reference previously cited by or submitted to the Patent Office in prior parent application Serial No. 10/036,428.

1a. [X] This Information Disclosure Statement is submitted:

within three months of the filing date (or of entry into the National Stage) of the above-entitled application, or

before the mailing of a first Office Action on the merits or the mailing of a first Office Action after the filing of an RCE,

and thus no certification and/or fee is required.

1b. [] This Information Disclosure Statement is submitted

after the events of above paragraph 1a and prior to the mailing date of a final Office Action or a Notice of Allowance or an action which otherwise closes prosecution in the application, and thus:

- (1) [] the certification of paragraph 2 below is provided, or
- (2) [] the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.
- 1c. [] This Information Disclosure Statement is submitted:

after the mailing date of a final Office Action or Notice of Allowance or action which otherwise closes prosecution in the application, and prior to payment of the issue fee, and thus:

the certification of paragraph 2 below is provided, and

the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.

- 2. It is hereby certified
 - a. [] that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the Statement, or
 - b. [] that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated in §1.56(c) more than three months prior to the filing of the Statement.
- 3. [] Consideration of the following list of additional information (including any copending or abandoned U.S. application, prior uses and/or sales, etc.) is requested.

For each non-English language reference listed on the attached form PTO-1449, reference 4. is made to: a full or partial English language translation submitted herewith, a. [] a foreign patent office search report (in the English language) submitted b. [] herewith, the concise explanation contained in the specification of the present application c. [] at page, d. [] the concise explanation set forth in the attached English language abstract, e. [] the concise explanation set forth below or on a separate sheet attached to the reference: 5. [] A foreign patent office search report citing one or more of the references is enclosed. Respectfully submitted, Hirotoshi TAKAHASHI et al. Registration No. 45,336 Attorney for Applicants

DMO/jmj Washington, D.C. 20006-1021 Telephone (202) 721-8200 Facsimile (202) 721-8250 July 3, 2003

											
Sheet 1 of 1											
FORM PTO 1449-(ri				SERIAL NEW	SERIAL NO. NEW						
U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE				APPLICANT Hirotoshi TAKAHASHI et al.							
LIST OF REFERENCES CITED BY APPLICANT(S) (Use several sheets if necessary) Date Submitted to PTO: July 3, 2003				FILING DATE			GROUP 2817				
Date	July 3, 2003				2017						
	U.S. PATENT DOCUMENTS										
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE		NAME	CLASS		SUBCLASS	FILING DA APPROPE		
m	AA	5,825,242	10/1998	Pro	dan et al.						
31	АВ	5,535,245	7/1996		Kim						
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OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)											
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EXAMINER MISS DATE CONSIDERED 92/4											

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.